Utah MCH Facts

Hispanic Infant Mortality from Perinatal Conditions A comparison of two time periods

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Utah Department of Health

Introduction

An analysis of Utah Perinatal Mortality Review (PMR) data comparing two time periods illustrated that the infant mortality rate due to perinatal conditions among Hispanic women increased from 2.1 during 1995–1998 to 2.8 during 2001–2003. This fact sheet describes the characteristics of the Hispanic mothers and infants included in the review and reports findings from individual chart reviews of all Hispanic infant deaths in the two time periods.

Hispanic Infant Mortality Rates Due to Perinatal Conditions

Hispanic infant mortality rates from perinatal conditions were calculated by dividing the number of Hispanic infant deaths due to perinatal conditions by the total number of Hispanic live births registered in the state of Utah during the two time periods. Infants born out of state but died in Utah were excluded from the data set. From 1995-1998, 34 Hispanic infant deaths were attributed to perinatal conditions resulting in a mortality rate of 2.1 (Table 1). From 2001-2003, 57 Hispanic infant deaths were identified as perinatal conditions resulting in a mortality rate of 2.8.

Table 1. Hispanic Infant Mortality Rates due to Perinatal Conditions by Time Periods, Utah

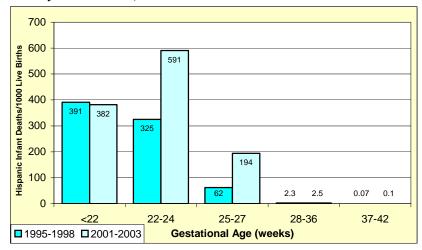
Time Period	1995-1998	2001-2003
Number of Deaths	34	57
Live Births	16,219	20,661
Infant Mortality Rate*	2.1	2.8

^{*}Hispanic infant deaths per 1,000 Hispanic live births

Gestational Age

In comparing the two time periods, a significant change in the gestational age-specific infant mortality rate occurred in both the 22-24 week age group (p<0.01) and the 25-27 week age group (p<0.05). (Figure 1) Of all the Hispanic infant deaths, 97% were to premature infants. Delivery at or before 25 weeks gestation occurred in 62% of the deaths analyzed.

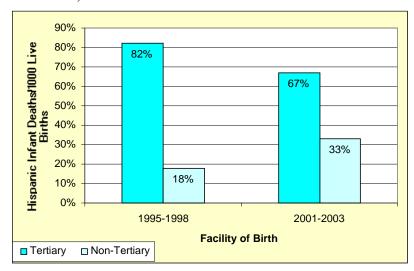
<u>Figure 1</u>. Comparison of Hispanic Gestational Age-specific Infant Mortality Rates by Time Periods, Utah



Hospital at Birth

In the 2001-2003 time period, a significant increase in Hispanic infant deaths among babies born in hospitals that don't routinely care for premature infants (non-tertiary care centers) was noted (p<0.05). In 1995-1998, 18% of Hispanic infants who died were born in these hospitals compared to 33% in the 2001-2003 time period. (Figure 2)

<u>Figure 2</u>. Proportion of Hispanic Deliveries by Hospital Type at Birth and Time Periods, Utah



Geographic Area

A significant increase in the Hispanic infant mortality rate was noted among mothers living in rural areas in 2001-2003 (p<0.05). In the 1995-1998 time period, a rate of 1.5 Hispanic infant deaths per 1000 Hispanic live births occurred to mothers who lived in rural areas. This rate increased to 4.3 in the 2001-2003 time period. (Figure 3)

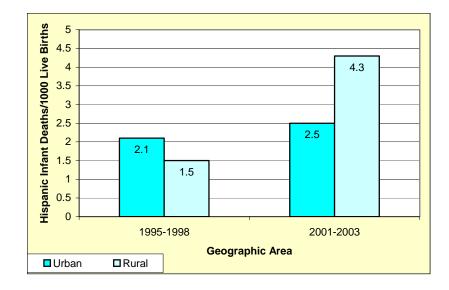
Chart Reviews

Ninety medical records of infants who died in the two time periods and their mothers were reviewed for common characteristics. Language barriers were identified in over a third of all the Hispanic mothers' charts in both time periods. In addition, over two-thirds of the cases reviewed indicated that Hispanic mothers delayed going to the hospital in a timely manner with problems such as preterm labor or infection from prolonged rupture of membranes.

Barriers to Care

Discussions with key informants from the Hispanic community indicate that lack of education about the need to access the health care system in a timely manner and inability to communicate needs because of language differences were barriers to health care for Hispanic women. These community leaders also reported that lack of insurance and health care costs prohibited women from getting into the hospital earlier for evaluation. Fear of being reported to the US Citizenship and Immigration Services (USCIS) was also reported as a barrier to accessing services.

<u>Figure 3</u>. Comparison of Hispanic Infant Mortality Rates by Geographic Area of Maternal Residence and Time Periods, Utah



Conclusions

The Hispanic infant mortality rate due to perinatal conditions increased between the two time periods studied. The number of infant deaths between 22 and 27 weeks gestation doubled with a corresponding increase in the number of infants that were born in non-tertiary care centers. Hispanic mothers living in rural areas in 2001-2003 had nearly triple the rate in infant mortality compared to those in the 1995-1998 time period. Chart reviews of the deaths in both time periods demonstrated a language barrier in many mothers and a delay in presentation for medical care. Discussions with representatives from the Hispanic community indicated that cost of care, communication and a lack of knowledge about the health care system in general could have contributed to the increase in infant mortality in 2001-2003. Interviews with mothers who experienced an infant death due to perinatal conditions and focus group discussions will be implemented by the Reproductive Health Program to better understand the reasons for the increase in Hispanic infant mortality and to identify culturally appropriate interventions.

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published by the Perinatal Mortality Review Program, within the Reproductive Health Program, Bureau of Maternal and Child Health, Utah Department of Health. For further information on this topic, please contact Pete Barnard CNM at (801) 538-9433 or visit our web site at www.health.utah.gov/rhp